

## WINE Talk: August 2019

The newsletter of Living Wines: Edition 86

We hope you enjoy this newsletter and remember that all past newsletters are available to read on our Living Wines Web site.

**For a full list of wines currently in stock and their prices see:**

<http://www.livingwines.com.au/Catalogue/Catalogue.htm>

**There is a link to our order form for these packs and any other wines at the end of this newsletter. But there's no need to use the order form. Just send us an email listing the wines and/or packs you would like to order if that suits you better. We'll confirm the price by return email before processing your order. If you're not personally known to us or haven't already, please also provide your date of birth so we stay legal (a requirement of Tasmanian legislation.)**

### Recent arrivals

We have just received a shipment with a mix of La Cadette, La Soeur Cadette and Montanet Thoden wines from the Montanet family in the north of Burgundy and some pink wines from the Mosse family in the Loire Valley.

---

#### EXPLAINING LA CADETTE / LA SOEUR CADETTE / MONTANET-THODEN

We're delighted to receive some new wines from Valentin Montanet, son of Jean and Catherine Montanet, who is now responsible for all the 'Cadette' winemaking. We have imported the Montanet family's wines for many years. They are excellent value and include a very rare Melon de Bourgogne, from grapes grown in Burgundy, the ancestral home of this variety. (These days it's almost entirely found in Muscadet.)

Their vines are in the Yonne département, in the far north of Burgundy. The story of the names on the labels of these wines gets a little more complicated each year so we thought we'd bring you up to date.

When we began working with them we received wines from Domaine de la Cadette (estate wines owned by Jean and Catherine Montanet), Domaine Montanet-Thoden (wines made by the family in the same cellar but from an estate owned by Catherine Montanet and a Dutch friend Tom Thoden) and La Soeur Cadette, which was the family's négoce, generally used for wine made from purchased grapes. (We say generally because sometimes we have received a La Soeur Cadette wine which was actually a mix of grapes from Domaine de la Cadette and Montanet-Thoden, so neither one nor the other. And just occasionally, even though the label says La Soeur Cadette the wine is actually made entirely from grapes one of the two estates (read on ...)

## WINE Talk – the newsletter of Living Wines

In recent times, working within the complications of French laws, they have rearranged things so that all the wines are bottled by La Soeur Cadette. This makes it much easier for us because, for example, instead of getting three invoices from them (and three lots of currency exchange fees and customs fees) we only get one.

As part of this change, of using a single entity, the “Domaine” names have disappeared from Cadette and Montanet-Thoden. Where our Cadette labels used to say “Domaine de la Cadette” they now say “La Cadette” and Domaine Montanet-Thoden just says “Montanet-Thoden”.

(You’ll also see on the labels of all them ‘Mis en bouteille par La Soeur Cadette’.) Technically we should call them all La Soeur Cadette and, if we didn’t in France, it would probably break a regulation but we have decided to keep naming the wines on our list so there’s some connection to their past and it’s easier (sort of) to know the story of the wines.

For wines which used to be “Domaine de la Cadette” we’re calling them “La Cadette”, we’re calling the Montanet-Thoden wines “Montanet-Thoden” and the wines that have the distinctive sort of psychedelic over-the-top fonts we’ll continue to call “La Soeur Cadette”. We have some of all of them in this shipment.

---

### WHITE WINES – Cadette and Montanet-Thoden

All the white wines in this shipment are direct pressed, naturally fermented and aged in stainless steel tank. They are all from the 2018 vintage so the ageing was quite short and they are suitable for early drinking. All the white wines are lightly filtered, about three or four weeks before bottling using a very soft, gentle technique over Kimmeridgian earth, which is comprised of microscopic shells. Valentin says it looks like a sponge. None of the wines are ever fined.

We have some La Soeur Cadette Melon 2018. The Melon was the first wine of theirs we ever tasted - in Paris at le Chateaubriand restaurant what seems like a lifetime ago. When we first started working with the Montanets there was a Domaine de la Cadette Melon and a La Soeur Cadette melon, the later made with purchased grapes, also grown organically.

During many grim recent vintages the Domaine de la Cadette cuvée disappeared and the wine was bottled as La Soeur Cadette Melon, containing their own and the purchased grapes. However, in the bountiful 2018 vintage they harvested enough melon to make this wine entirely from their own grapes. In theory this could have revived the Cadette label again but because over the last few years there has only been a La Soeur Cadette Melon and no doubt anticipating that this may be a one-off occasion, the 2018 melon was bottled and will continue to be bottled as La Soeur Cadette Melon (nothing is simple!!).

However, we also have some La Soeur Cadette Bourgogne Blanc 2018, which is a true négoce wine, made with purchased grapes from the north of Mâcon. This wine is not certified organic but Valentin, who visits the vineyard each year, has assured us the farming is organic. However, with no certification on the label it wouldn’t be appropriate to advertise it as such on a wine list.

### RED WINES – Cadette and Montanet-Thoden

We have some La Cadette Bourgogne Rouge Champs Cadet 2017 and Montanet Thoden Bourgogne Rouge Garance 2017, both of which are estate reds. Naturally fermented in large wooden tanks and aged in old barrels, none of the red wines are filtered.

However, they spend a month in tank after racking from barrels to ensure all the larger particles have time to precipitate to the bottom of the tank before bottling. In 2017, which was a small harvest, Valentin used whole bunches, partly to help fill the tanks. (It was the opposite in 2018, where everything was destemmed to make space!). The wines spent 9 months in barrels, being bottled around mid 2018.

When we tasted them in France earlier this year Garance was the lighter of the two, very easy to drink with balanced tannins and Champs Cadet had much more depth. Garance was strawberries and Champs Cadet was big black cherries. Champs Cadet is named after the parcel where the grapes are from and Garance, which is sourced from several plots, is named after a blue flower which grows amongst the vines. (Incidentally, its roots are red and used as a dye including for the famous red pants (Pantalon Garance) traditionally worn by French soldiers).

---

### MOSSE MOUSSAMOUSSETTES IN MAGNUM

Unfortunately, most of the shipment from the Mosse family, which was a rosé called Bangarang from the 2018 vintage, sold in a few days – before we could get a newsletter out. We're very sorry. It took us by surprise.

We do though still have some magnums of **Moussamoussettes 2018** from this shipment. They are limited to 3 magnums per customer, and it won't be many customers, so order early if you would like some. This is the same wine which we received in 750ml bottles in June.

However, a little too late, we did save 2 bottles of the Bangarang rosé, and they are part of a rosé pack in this newsletter. There are only two packs because of the Bangarang problem so it's the first two to order who will get a chance to try them. (We're tried to buy some more Bangarang but it is sold out!)

### WHAT'S COMING NEXT – BORNARD, GESCHICKT, OPI D'AQUI, LEBLED

Our next shipment, due at the end of September, will have new vintages from **Domaine Bornard**, with plenty of familiar cuvées, including in white Les Chassagnes 2017, Blanc de la Rouge 2016, in red Ploussard Point Barre 2016 (from Arbois-Pupillin – we have already had an Arbois cuvée), late-released 2015 Arbois Pupillin Point Barre, and small quantities of 2015 and 2016 Trousseau Le Garde Corps and Pinot Noir l'Aide Memoire. There's also some Tant Mieux pet nat which has not been disgorged.

These will all be very limited, with limits on the number of bottles of individual cuvées, and some may not end up being advertised (including a few magnums we haven't mentioned) so please let us know in advance if you are interested in these wines.

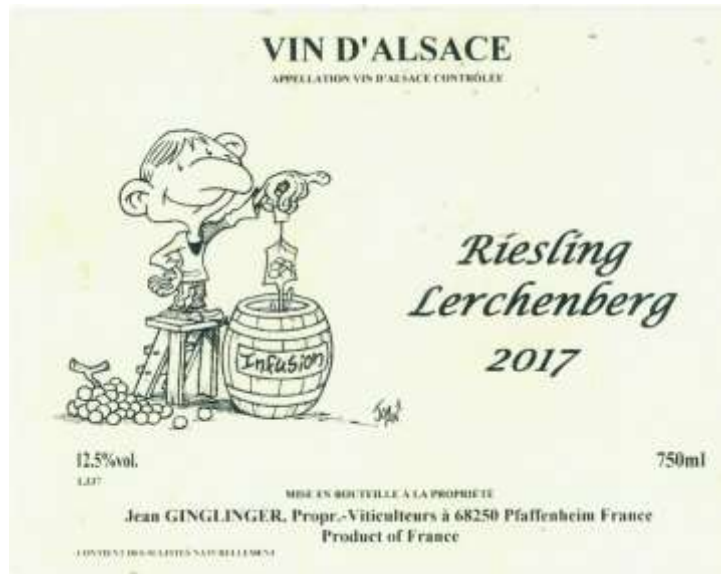
## WINE Talk – the newsletter of Living Wines

Our new **Geschickt** wines will include from 2018 the delicious Obi wine pet-nat and Phenix (macerated Pinot Gris) as well as some Crémant d'Alsace 2016, Le Pino 2016, Riesling 2016 and small quantities of Kaefferkopf Grand Cru Riesling 2016 and Kaefferkopf Grand Cru Gewurztraminer Maceration 2017.

From **Philippe Formentin's Opi d'Aqui** we'll have the 2018 vintages of Orangeade, Les Cliquets, Massale, (slightly different this vintage as, in addition to the three types of Grenache (noir, blanc and gris), it also has a small amount of Picpoul added to increase freshness. There is also Mars Ane, Poupoule (100% Picpoul) and a new cuvée, Abricoter, another light red made with 100% Grenache Noir.

With such small vintages in the Loire in recent years we haven't managed to bring any of **Laurent Lebled's** wines into Australia. Fortunately 2018 was bountiful and he has enough wine for us to take a pallet again. We're receiving 2018 Ça c'est Bon (Gamay) and On Est Su l'Sable (Cabernet Franc), 2017 La Sauvignonne, which is macerated Sauvignon Blanc, and a small allocation of 2017 Je t'ai dans la peau, which is macerated Menu Pineau.

## Pack 1: Last Bottle 6 Pack 20% discount



It's a very special Burgundy rich last bottle pack this month. That makes it a little more expensive than normal but a bigger bargain, with a huge saving of \$70! It has three red and three white wines. The red wines are all Burgundies, two with several years aging - the Sextant Bourgogne Rouge 2014 (which was our pick of the vintages when we last tried 2014, 2015 and 2016 side by side) and the Montanet-Thoden Bourgogne Rouge Garance 2014. The third one, Fanny Sabre's Pommard 2017 will age beautifully. There's also Jean Ginglinger's very rare Riesling Lerchenberg from the 2017 vintage and two good-value whites from Mylène Bru and Marc Pesnot.

There is only one pack available, so it is first in first served

**Montanet-Thoden Bourgogne Rouge Garance 2014**

**Marc Pesnot Nuitage Vin de France 2014**

**Fanny Sabre Pommard 2017**

**Mylène Bru Lady Chasselas 2015**

**Sextant - Julien Altaber Bourgogne Rouge 2014**

**Jean Ginglinger Riesling Lerchenberg 2017**

The RRP for this selection of 6 wines is \$360 but the pack price is only **\$288** including freight to most Australian cities.

**Pack 2: Cadette New Arrivals 6 Pack 15% discount**



This pack contains a sampling of our recent arrivals from the Montanet family which you'll find described in some detail at the start of the newsletter. It includes two bottles of very rare Melon de Bourgogne – there are only about 15 hectares of this variety still planted in Burgundy, its ancestral home. (The grape itself is not rare because it's the grape used to make Muscadet but that of course comes from the Loire Valley, not Burgundy.) There are three red wines and three white wines. The wines in the pack are:

**WHITE**

**2 bottles of La Soeur Cadette Melon 2018**

**1 bottle of La Soeur Cadette Bourgogne Blanc 2018**

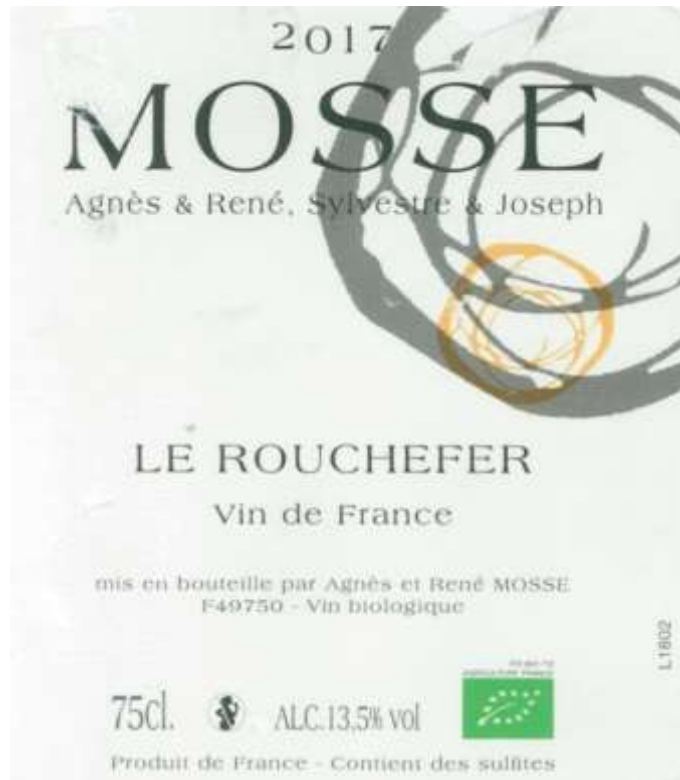
**RED**

**2 bottles La Cadette Bourgogne Rouge Champs Cadet 2017**

**1 bottle Montanet-Thoden Bourgogne Rouge Garance 201**

The RRP for this selection of 6 wines is \$287 but the pack price is only **\$243.95** including freight to most Australian cities.

### Pack 3: Mosse Chenin Blanc 6 Pack 15% Discount



This pack is one for Chenin Blanc lovers (or anyone inquisitive about this wonderful grape). We remember how much people tasting at Rootstock the year Sylvestre Mosse represented his family enjoyed a chance to try a number of cuvées from different vineyards side by side so we thought we'd create a pack that provides a similar experience (although missing, of course, the knowledge and charm of Sylvestre). The wine making is similar for each of them so when you try wines from the same vintage, as the first four of these are, you're really tasting the impact of the different parcels and the impact of the age of the vines.

The other two are unique wines. The Marie Bonnes-Fer is a consequence of the frost-affected 2016 vintage when the harvest was so small that the grapes from several parcels that would usually have been made into separate wines were combined so there were enough grapes to make a wine. It has grapes from the parcels Marie-Besnard, Bonnes Blanches, and Le Rouchefer.

The Marie-Besnard is a consequence of the opposite situation. 2015 was a wonderful vintage and, once everything was done and dusted and in the cellars, they decided to make a separate wine with the grapes from Marie-Besnard (planted in 1950, this parcel is usually part of Initials BB). They aged it in two year old barrels for 22 months, much longer than normal, bottled it in July 2017 and released it in 2018.

There's information about these wines on our website but Domaine Mosse's website is exceptional so if you decide to buy this pack and want to dig deep into each cuvée make sure you read the specifications they provide. There are different ways of locating any wine on their website but you'll find them all [here](#), which lists all the white wines. It's in French but reasonably easy to translate. If you need help let us know!

**WINE Talk – the newsletter of Living Wines**

**Mosse Chenin 2017**

**Mosse Le Rouchefer 2017**

**Mosse Les Bonnes Blanches 2017**

**Mosse AOC Savennieres Arena 2017**

**Mosse Marie Bonnes-Fer 2016**

**Mosse Marie-Besnard 2015**

**The RRP for this selection of 6 wines is \$449 but the pack price is only **\$381.65** including freight to most Australian cities.**



## Pack 4: Rosé 6 Pack More than 15% Discount



**There are two of these packs available** because of the rapid selling of the Mosse Bangarang rosé (which incidentally we bought more of than almost any other individual wine this year) so don't hesitate if you are thinking about buying one.

There are five different rosés, all quite different. Most are discounted by 15% but there's a slightly bigger discount for the Cohen Clair to make it the same as its price in our spring cleaning pack.

Apart from the Cohen, which is from the Languedoc, they are all from the Loire Valley.

The wines are:

**Mosse Bangarang 2018**

**2 bottles of Domaine de la Garrelière Le Rosé de la Cabane 2018**

**Domaine Saint Nicolas Reflets Rosé 2017**

**Hervé Villemade Cheverny Rose Domaine 2017**

**Les Vignes d'Olivier Clair 2015**

**The RRP for this selection of 6 wines is \$181 but the pack price is only **\$148.45** including freight to most Australian cities.**

## Pack 5: Spring Clean 6 pack 30% discount



This pack contains two white wines, a very light rosé, and three red wines, although L'Escarpolette (Ivo Ferreira) La Petite Pépée (the first white wine on the list) is unusual because it is made from a red grape (grenache noir) which is direct pressed to avoid any colour from the skins. The wines are:

### **WHITE**

**L'Escarpolette (Ivo Ferreira) La Petite Pépée 2017**

**Domaine Saint Nicolas Le Haut des Clous 2015**

### **LIGHT PINK ROSÉ**

**Les Vignes d'Olivier Clair 2015**

### **RED**

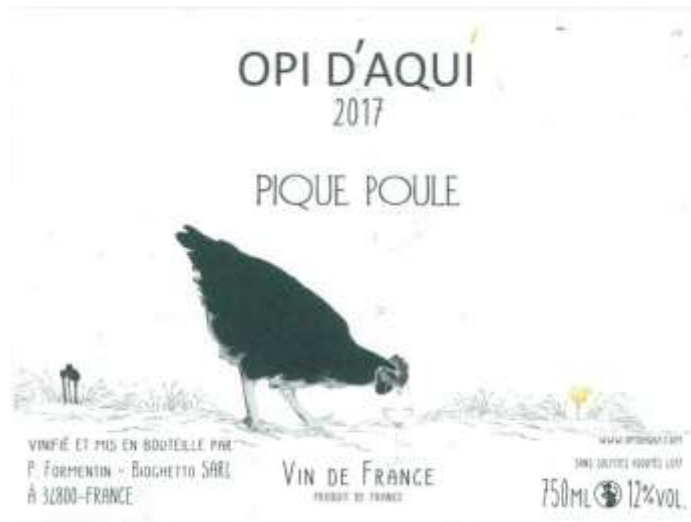
**Opi d'Aqui Menage a Trois 2015**

**Nicolas Carmarans IGP Aveyron Maximus 2015**

**Julie Brosselin Rue de la Peste 2015**

The RRP for this selection of 6 wines is \$283 but the pack price is only **\$198.10** including freight to most Australian cities.

## Pack 6: What We're Drinking 6 Pack



We always like doing a 'What we're Drinking' pack although this one is tinged with a little personal disappointment because we were planning to drink a lot of Mosse Bangarang Rosé this month. It wasn't to be though. Nevertheless, there are plenty of other things we're enjoying at the moment, so it wasn't hard to come up with a list of fun wines.

### **BUBBLES**

**Jean-Pierre Robinot Années Folles 2017 (Chenin Blanc, Pineau d'Aunis)**

### **WHITE**

**Michel Gahier Arbois Chardonnay Les Follasses 2016 (Chardonnay)**

**Opi d'Aqui Pique Poule 2017 (Picpoul)**

### **ORANGE**

**L'Escarpolette Céleste 2017 (Muscat à Petits Grains)**

### **LIGHTER THAN LIGHT RED**

**Opi d'Aqui Massale 2017 (Grenache Noir, Grenache Gris, Grenache Blanc)**

### **LIGHT RED**

**Derain Las Nubes 2018 (Pinot Noir from Chile)**

The RRP for this selection of 6 wines is \$372 but the pack price is only **\$316.20** including freight to most Australian cities. Only a small number are available.

## Le Rouge & Le Blanc now available in a digital English edition

If you frequent good wineshops in France you've probably noticed that most also will be selling the latest edition of *Le Rouge & Le Blanc*, a wine magazine which has been published since 1983. We feel a strong connection to it because Jean-Pierre Robinot, one of the producers we work with, was one of its founders.

The magazine still follows the basic principles on which it was established. It takes no advertisements and it is written by volunteers (as it's described on their website, by a COLLECTIF) whose members share similar beliefs and passions. The content is a mix of informative stories about wine regions and producers, occasional interviews, and reviews of wines which complement the stories, and always through the prism of organic viticulture, natural fermentation, and minimal additions. If you would like to know more about its philosophy head to this [page](#) on their website and watch the short video. It's in French but with sub-titles in English.

Until recently it has only been published as a print edition and only in French but it is now available in a digital edition in English complemented by an English language version of its website. The English version of the website has a number of freely-available articles, including several on the subject of minerality, which we've talked about more in another story in the newsletter.



It's possible to buy individual digital copies of the magazine or take out a one or two year subscription. The options to do either are part way down the screen.



Once you have subscribed you can then read the magazines online.



It's a wonderful new English language resource for anyone interested in French wines and even occasionally delves into foreign regions. A one year subscription, including two welcome issues with four quarterly releases and no advertisements, is €65.

(And a word of warning – when we subscribed using an ANZ Visa the payment was first refused and the bank sent a text message advising the card had been suspended because of “unusual activity”. It was a simple process to confirm it was a legitimate transaction and then try again 15 minutes later.)

## Exploring minerality in wine

In the previous article we talked about the English language version of the Le Rouge et Le Blanc Web site. One of the topics which is being addressed on that site is that of minerality in wine – a much misunderstood topic.

The problem with the topic is the lack of precision in the language which leads different people to different views about the meaning.

For example, minerality starts with the soil that vines grow in. Those who study soils think of soil as decayed rocks and rocks are comprised of minerals such as quartz, feldspars, micas, olivines, calcites and pyroxenes to name but a few.

Some of these minerals have simple chemical structures and some are quite complex. Quartz, for example, is quite simple it contains a Silicon atom connected to two Oxygen atoms ( $\text{SiO}_2$ ), however in its crystal form it can be very, very large. On the other hand, Olivine which is derived from magma deep in the Earth's crust sees elements such as Magnesium, Iron and Silicon combining with Oxygen. The chemical formula is  $\text{MgFe}_2\text{SiO}_4$  and the resultant mineral can be quite tiny or relatively large.

Regardless of the mineral we are talking about, there is no way that any of these minerals are transported from the soil through the vines and into the grapes – it is just physically impossible!

And this is where the articles come into their own. We suggest that you start with the interview titled "Talking about Minerality" which sees Jean-Marc Gatteron interview David Lefebvre about the topic and then read the other two articles. (We have been waiting patiently for these to be published after having being asked at the end of last year by Peter Herman to comment on his draft translation.)

In the interview, David explains minerality in terms of the difference between organic compounds and inorganic compounds, with the inorganic ones being the minerals. When asked by Jean-Marc about his approach to minerality, David explains it this way:

*It stems from my background as a chemist. At university, the chemistry curriculum covers both mineral (inorganic) and organic chemistry. The mineral part corresponds to 40% of the curriculum. However, when preparing an oenology diploma, the focus is primarily on the organic elements. This is surprising, since we know that minerals are omnipresent in wine. In fact, wine is about 85% mineral, including water, which is a mineral compound, the  $\text{CO}_2$  and the various salts. In addition, there is the organic/ mineral interface with its organo-mineral elements. A mineral compound is stable over time. Wine is made up of these stable elements plus others which can still decompose.*

So, he is using the word mineral to describe the organic elements which are clearly categorised in the Periodic Table, starting with very simple elements such as Hydrogen (H) and Helium (He) and Carbon (C) and progressing through medium complexity such as iron (Fe) and Silver (Ag) through to the very complex such as Radium (Ra) and Uranium (U).

He goes on to describe how these elements can combine to form salts (such as common salt formed from the elements sodium and chlorine, NaCl) which are capable of being transported

through the vines. He also points out that these salts do not vapourise and hence do not contribute to aromas in wine.

*Mineral salts cannot turn into gas, they may be 100% soluble or insolubilized (they form crystals), but they don't go into the air. In contrast, organic compounds do have an odor.*

The discussion continues and addresses the interactions between organic and inorganic compounds in wine and the role they play.

When you have absorbed this document, the next to consume is Aromas and Minerality in Wine where Michel Legris also writes about the views of David Lefebvre in quite a detailed article that extends the concepts in the Talking about Minerality article.

We will leave you to explore that one on your own, but we look forward to more articles on this very interesting topic.

## A Little Living Wines Lexicon

(with help from Forbes Appleby)

Sometimes we think anyone overhearing us in a restaurant must think we are slightly crazy, especially if we are ordering wine from our friend Forbes Appleby, who is sommelier at Hobart's acclaimed Franklin restaurant. He knows exactly what we mean if we ask for one of these sorts of wines and coined one of the terms. (We have more but some are not really suitable for publication in our newsletter.)

**Driving Wine** While not encouraging driving and drinking in any way, if you are going to have a glass of wine and drive, which is of course legal, it makes sense to choose something that is lower in alcohol. We use the term 'driving wine' for anything that is **less than 12% ABV**. We don't use this term often as we rarely drink just one or two glasses so don't drive when we drink but when we are travelling in France particularly and on the road at lunchtime a driving wine is definitely what we look for. Interestingly, there are a lot of natural wines that fit into this category. We have plenty of driving wines in our portfolio, sometimes as low and lower than 10%. Choosing a glass of a lower % ABV with the knowledge of the scientific research we wrote about in a prior issue that suggests that natural wines cause your blood alcohol level to rise just a little more slowly than so-called conventional wines with the same % ABV makes you feel just that more responsible.

**Parallel Wine** We tend to share the dishes we eat in restaurants, swapping plates part way through a course if the restaurant serves a traditional western entrée then main course. And, of course, a good proportion of the restaurants we eat at encourage sharing of dishes, often bringing out several plates, family-style at the same time, something like the example below from Tom McHugo's Hobart Hotel:





## WINE Talk – the newsletter of Living Wines

Swapping dishes or eating this way the flavour profiles don't always lend themselves to a simple progression from white, to red wines or some other variant. It's much better to choose a couple of parallel wines – depending on the restaurant and on your mood – it might be one white and one red, or one orange and one rosé – there are infinite options – and ask the restaurant for a glass for each wine and as you switch what you eat switch what you drink.

Parallel wines can also work quite well when you are enjoying an extended degustation menu. Fortunately, these days some chefs have freed themselves from the tyranny that in such a menu each dish gets heavier and richer, and create something that's more of an undulating flavour and richness profile.

When that happens it can work quite well to sit on two wines and choose the right one for the right dish. (If it's a more traditional progression you probably don't need to make the commitment to parallel wines at the beginning of the meal and can drink something lighter first then move on to something richer later in the meal.)

Apart from being such a sensible idea, parallel wines also provide the opportunity to play the game of who thinks which wine matches best with which dish which can lead to great conversations.

By the way, parallel wines and the two terms which follow are all a complete concept mismatch with driving.

**Wedge Wine** This term was invented by Forbes. It's the opposite to a bridging wine (see below) even though a specific wine could easily be either. The right term to use depends on the purpose of the bottle not the nature of the wine itself. It's only really viable if you have a group of people to share it at the table. We would not recommend a single diner or even two diners drinking a wedge wine, even though we can't deny we have, although in this example at la Dilettante in Beaune, where we needed to fit something in before a serious cheese course with an oxidative white, there were three of use.



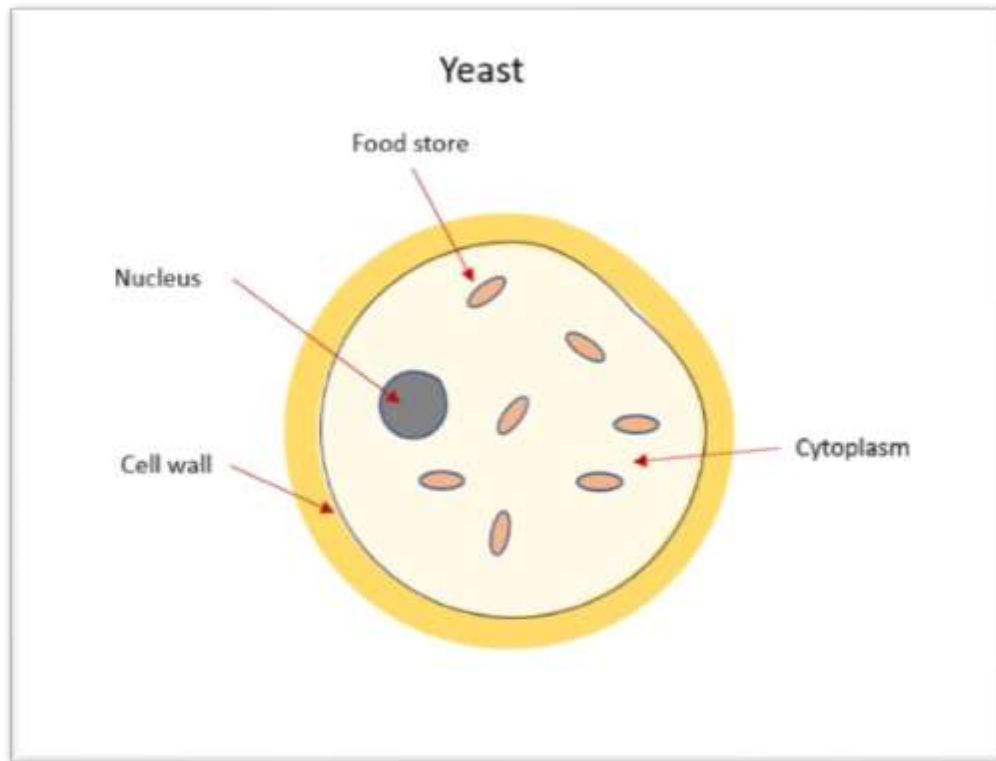
## WINE Talk – the newsletter of Living Wines

It's for the situation where, during a meal you are between courses. You may be drinking a bottle that really demands food or have finished the wine you were drinking with your savoury courses and want something to drink before dessert arrives. It's a wine to wedge between courses and usually between two other wines. Generally a driving wine is a good solution here because the fact you need it means you have probably already drunk more than the most lenient recommended guidelines. (And of course if the restaurant has an interesting list of wines by the glass, then if there are not many people at the table this is perhaps better solved with a wedge glass than a wedge bottle.)

**Bridging Wine** A bridging wine has a very specific purpose. It's in a situation where you have taken the wine pairing option which so many restaurants provide these days. We like to do that sometimes, especially if we know it's a place where the sommelier puts a lot of effort into the matching, often using sake, beer and other beverages as well as wine. But if we do that we always feel more comfortable if we have a bridging wine beside us, one we can dip into between the courses when often the matching drink, even if you make it last, no longer seems apt. Once again driving wines tend to make good bridging wines. A bridging wine needs to be something that's suitable to drink without food but with enough complexity and interest that it's not going to pale against whatever wines have been chosen for the pairing.

We hope you find them useful!

## The secret life of yeasts – Part 2



In a previous newsletter we introduced a new series of articles that will explore, in depth, the life of natural yeasts and why they are so important in the making of natural wines. We are concentrating on yeasts in this series and we will do a future series on the role played by bacteria, particularly in malolactic fermentation.

In this article we will explore some of the most vexed questions about how the yeasts actually get onto the grapes and why many studies have shown a distinct lack of the most voracious of all yeasts (*Saccharomyces cerevisiae*) on grape skins, even when they are ripe.

We found a useful summary of the research into this topic in a paper entitled “Overwintering of Vineyard Yeasts: Survival of Interacting Yeast Communities in Grapes Mummified on Vines<sup>1</sup>” which explored yeasts living in mummified grapes that had been left on the vines over winter.

This paper summarises existing research and makes the following points:

- The paper repeats the common wisdom of how natural yeasts do their work “*the conversion of grape must into wine involves the development and succession of yeast populations differing in species composition. The initial population is formed by vineyard strains which are washed into the must from the crushed grapes and then completed with yeasts coming from the cellar environment.*”

---

<sup>1</sup> Sipiczki, M (2016) Overwintering of Vineyard Yeasts: Survival of Interacting Yeast Communities in Grapes Mummified on Vines. *Frontiers in Microbiology*. 29 February 2016.

- It then introduces an hypothesis which is the subject matter of the paper *“that grape yeasts can be preserved in berries left behind on vines at harvest until the spring of the next year. These berries become mummified during the winter on the vines.”*
- They assert that *“the grape berries are colonized in the vineyard ... and their communities change over time depending on the stage of ripening.”*
- They then add another factor which has been observed frequently *“The main factor determining the composition of the yeasts communities on the grape appears to be nutrient availability on the berry surface which increases with ripening.”*

The idea that yeasts only exist on the surface of the grapes is reinforced in an influential paper by Mortimer and Polsinelli<sup>2</sup> where they state:

*Part of this controversy is due to the extreme difficulty of finding Saccharomyces cerevisiae on the grapes. We estimate that only about one in one-thousand grape berries carries wine yeast. However, we have found that grape berries that are damaged (i.e. the skin is broken) are very rich depositories of microorganisms including S. cerevisiae, and that one in four such berries is S. cerevisiae-positive.*

They then give a small hint about what the answer might be:

*We believe that the yeasts are brought to the berries by insects such as bees, wasps, and Drosophila and that they multiply in the rich medium of the grape interior.*

They propose the theory (which has since been confirmed as part of the answer) that yeasts are brought to the grapes by agents called “vectors” with bees, wasps and fruit flies being the main ones. But they also, in a very understated way, add a phrase about the yeasts multiplying in “the rich medium of the grape interior”!!

This is something that is rarely discussed in the scientific literature. A cynic might say that it suits the commercial yeast industry to propagate the idea that there are low populations of native yeasts on the surface of grapes therefore winemakers need to add commercial yeast to their juice. We therefore went looking for evidence that thriving yeast populations exist inside the berries.

This came in the form of a paper published in the Ithaca Journal<sup>3</sup> (Journal for Terroir Wine, Biodiversity and Climate Farming) where the authors carried out a very simple yet effective experiment that proved that there is another way that yeasts can enter the winemaking story.

The introduction to this paper mentions the work of Mortimer et al mentioned above especially the fact that only 0.1% of grapes carry cells of Saccharomyces cerevisiae on the surface. The yeasts varieties that are most commonly present are Pichia, Kloeckera and Metschnikowia. They

---

<sup>2</sup> Mortimer, R and Polsinelli, M (1999) On the origins of wine yeast. Research in Microbiology Vol 150(3).

<sup>3</sup> Mandl K, Schieck J, Sikhavy-Richter K, Schneider V, Schmidt HP: Vines take up yeasts from soil and transport them through the vine to the stem and grapes, Ithaca-Journal 2015, Arbaz, Switzerland, ISSN 1663-0521, pp. 349-355.

also note that fact that the presence of yeasts on the grapes is influenced by the application of pesticides.

They also quote research by Magyar et al, 2009 and by Setati et al 2012 showing significantly higher diversity of yeast types in biodynamic vineyards as these do not use pesticides or soil covers.

And now to the experiment. The authors designed an experiment to determine if yeasts living in the soil could travel up through the roots and through the vines and then into the grapes and onto the skin. To do this they had to know which yeasts were in the soil.

For the experiment, they chose 11 commercial yeasts which were identifiable from “microsatellite analysis” following a technique documented by Shilhavy in 2006. The assumptions were that these were commercially manufactured yeasts with a uniquely identifiable structure that were not likely to be present in the soil.

A 1200 square metre site was chosen in Austria and herbicides were used to kill off any existing yeasts in the soil.

The grapes on the vines were sprayed with alcohol to kill off any yeasts that might have been currently on the grapes. The bunches were then wrapped in plastic so no yeasts could be deposited by “vectors” during the experiment.

Eleven vines were then inoculated with the one of the eleven yeasts. Four days later one plastic bag was cut from the vine and the grapes were crushed and analysed for yeast content. The same was carried out on the 11<sup>th</sup> day and so on.

The results were clear. Although none were found after four days, the results from analysing the crush from the grapes removed on the 11<sup>th</sup> day showed the presence of the yeasts that were placed in the soil. Sometimes only the vine they were placed around showed that strain of yeast whereas in other places it showed up in neighbouring vines which they attributed to the long root system of the vines.

The findings of the researchers are summarised in their conclusion:

*According to the results obtained it has been shown that soil microorganisms use an endophytic<sup>4</sup> way to get transported via roots and stems to the surface of grape berries. Spontaneous fermentation is frequently used with the purpose to improve regional flavor characteristics (terroir). Soil born yeast taken up by vine roots and transported via vine to the grapes and stems may thus have a direct influence on the expression of terroir and regional wine flavor derived from yeast metabolism during alcoholic fermentation.*

This experiment clearly shows that one way that yeasts get into grapes is by transporting themselves up through the vines and into the grape and then onto the grape surface. But the conclusion that must be drawn is that there are many yeasts also residing inside the grapes where the sugars develop as the grapes ripen.

---

<sup>4</sup> Endophytic refers to micro-organisms interacting with plant tissue for mutual benefit.

## WINE Talk – the newsletter of Living Wines

This experiment also clears up another mystery for us which exists in relation to the process known as carbonic maceration where whole bunches of grapes are placed in a tank and then carbon dioxide added to put the yeasts to sleep and allow enzymes within the grapes to initiate a weaker and slower form of sugar conversion to alcohol.

The theory is that about 2% of the potential alcohol is converted in this way and the rest is converted when the whole bunches are crushed and normal yeast fermentation commences.

However, we have twice recently been lucky enough to taste grapes from whole bunches that have been under strict carbonic maceration. In the first case Alice Bouvot from Octavin in the Jura gave us some grapes to taste in April which means that they had been in the tank under carbon dioxide since they were picked in September of the previous year, a period of nearly 7 months. We were surprised at the amount of alcohol present in the grapes, and this did not fit the 2% theory.

We had the same experience when we visited Axel Pruffer in late July last year. In this case the grapes had been in the tank for 10 months and were even more alcoholic.

Our emerging theory is that yeasts that are inside the grapes may not be put to sleep by the carbon dioxide in the tank and continue to convert sugars into alcohol.

We shall continue to explore this theory and report back on our discoveries!

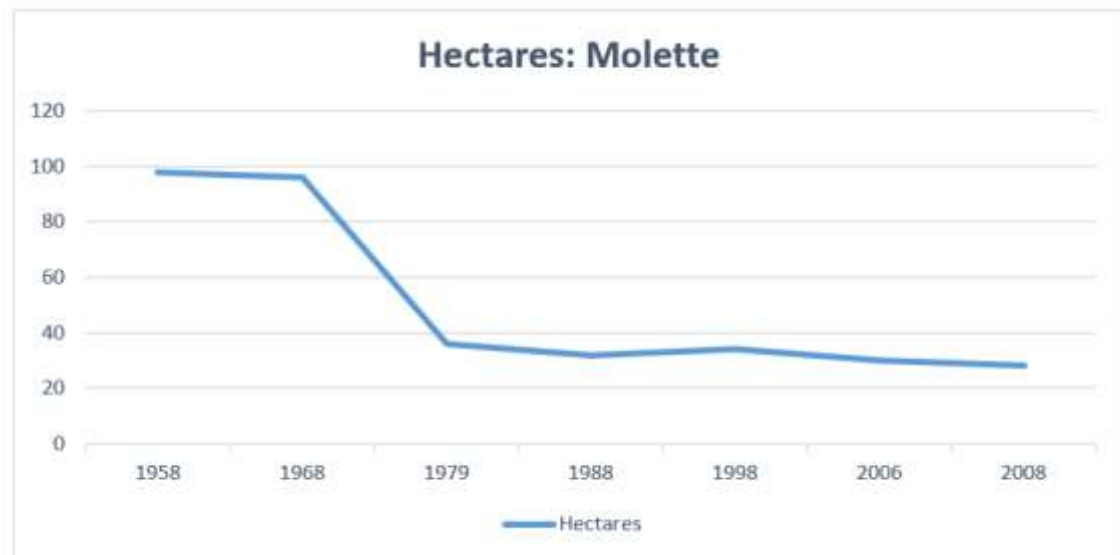
## Grape varieties: Molette

We decided to tell you about Molette this month because some of you bought the wines of Alice Bouvot from l'Octavin in the Jura last month (they have all disappeared now, although read on for a secret offer) and three of the cuvées were made using some Molette.

One of the most interesting things about this grape variety is that DNA testing has shown that the parents are the ever-present Gouais Blanc and one of our favourite grape varieties, namely Gringet – that beautiful variety that Dominique Belluard in the Savoie makes such elegant and refined wines from.

So this suggests that Molette is a native variety of the Savoie because Gringet is never found outside this region.

As can be seen in the following graph, the area devoted to Molette (and almost exclusively in the Savoie region) has slowly declined over time from almost 100 hectares down to 28 hectares.



There are many small plots of Molette throughout the Savoie as far down as Chatillon-en-Diois (an important location for us because of Pierre Jancou's Café des Alpes) and as far north as the boundary of the Jura. This whole area is one of stunning beauty where every view has a backdrop of stunning mountains, often blanketed in snow.

Some of the experimental winemakers in this region are coming to realise that Molette is a grape variety that can produce white wines of amazing refinement.

**And as a potential reward for anyone interested enough to read this story, we have taken one bottle of Alice Bouvot's l'Octavin Clé à Molette 2017 from our tiny personal allocation and made it available to anyone who wants to explore this grape variety in a little more detail by drinking it. This wine was made from certified organic grapes that Alice picked from the vineyards of Domaine Trichon in Bugey which lies between Beaujolais and the Jura. It's \$64 a bottle, plus freight if you only buy it, but could be bought as part of a 6 pack of other more readily available wines, which would mean a 10% discount and free freight.**

## WINE Talk – the newsletter of Living Wines

The leaf of the Molette grape variety is very distinctive with a strong frontal lobe and four less pronounced lobes towards the back of the leaf as shown below.

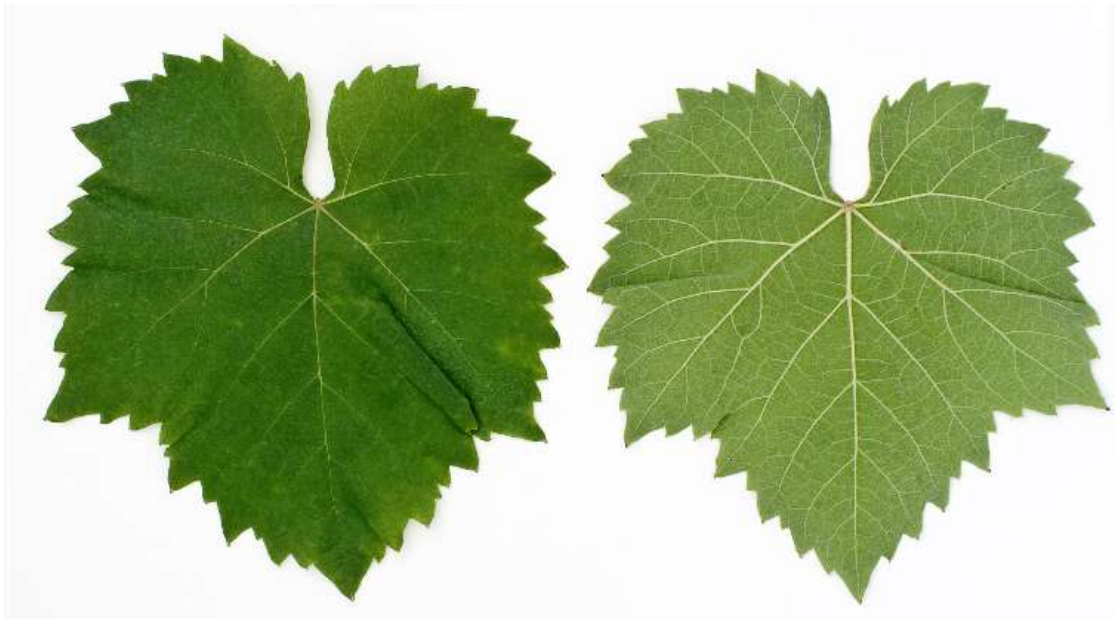


Photo Courtesy of Vitis International Variety Catalogue

The grape bunches with quite large grapes which are tightly packed which opens them to disease pressure during wet periods as shown below.



Photo Courtesy of Vitis International Variety Catalogue



## How to order

You can order any of these packs by sending us an email to [wine@livingwines.com.au](mailto:wine@livingwines.com.au)

Or for other wines you can use our order form or just describe the wines in an email.

We provide a 10% discount for 6 pack orders and free freight to most parts of Australia if we ship by courier. There is a freight charge for orders which have to be shipped using Australia Post, either for personal preference or because it's not covered by our national courier rate.

It is fine to order single bottles although orders of less than 6 bottles will almost always attract a freight cost.

[http://www.livingwines.com.au/Catalogue/Order\\_Form\\_Current.pdf](http://www.livingwines.com.au/Catalogue/Order_Form_Current.pdf)

### **WARNING**

Under the *Liquor Licensing Act 1990* it is an offence:

**for liquor to be delivered to a person under the age of 18 years.**

*Penalty: Fine not exceeding 20 penalty units*

**for a person under the age of 18 years to purchase liquor.**

*Penalty: Fine not exceeding 10 penalty units*

Because of the above penalties we are now required by the Tasmanian Government to collect your date of birth in order from you to order via the Internet. We apologise for this imposition. In the past we have been able to accept a declaration that you are over 18.